

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number
WO 2004/000690 A2

(51) International Patent Classification⁷: **B65D 85/10, 5/38**

(74) Agents: **JORIO, Paolo et al.**; c/o Studio Torta S.r.l., Via Viotti, 9, I-10121 Torino (IT).

(21) International Application Number:
PCT/IT2003/000387

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 23 June 2003 (23.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
BO2002A 000401 24 June 2002 (24.06.2002) IT

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **G.D SOCIETA' PER AZIONI** [IT/IT]; Via Battindarno, 91, I-40133 Bologna (IT).

(72) Inventors; and

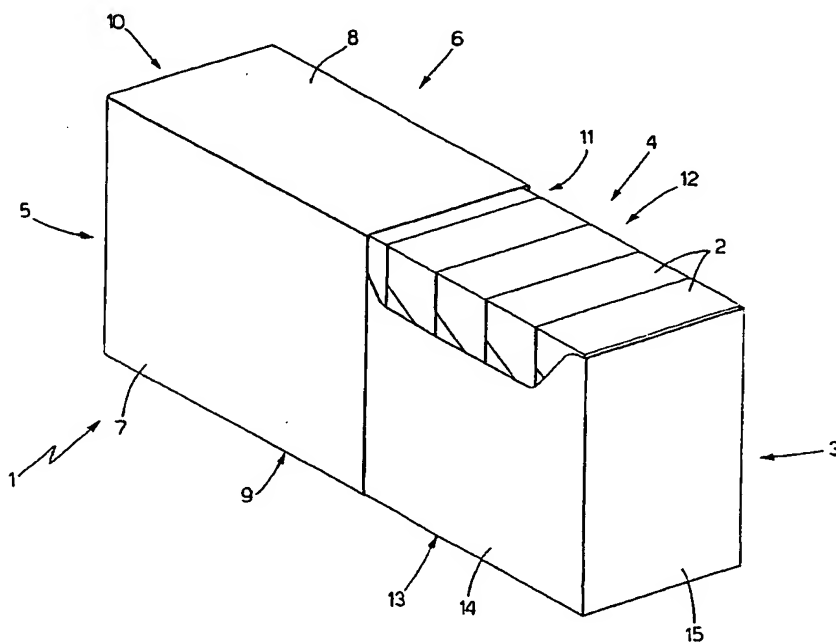
(75) Inventors/Applicants (*for US only*): **GIANNINI, Antonella** [IT/IT]; Via Murri, 114, I-40137 Bologna (IT). **CHINI, Stefano** [IT/IT]; Via Gramsci, 11, I-40068 San Lazzaro di Savena (IT). **DRAGHETTI, Fiorenzo** [IT/IT]; Via San Donino, 506, Frazione Villafontana, I-40059 Medicina (IT).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **RIGID CARTON OF PACKETS OF CIGARETTES**



(57) Abstract: A rigid carton (1) of packets (2) of cigarettes, having a first container (3), which houses a group (4) of packets of cigarettes and is in turn housed inside a second container (5) so as to slide, with respect to the second container (5), between a closed position wherein the first container (3) is fully inserted inside the second container (5), and an open position wherein part of the first container (3) is extracted from the second container (5).

WO 2004/000690 A2

RIGID CARTON OF PACKETS OF CIGARETTES

5

TECHNICAL FIELD

10 The present invention relates to a rigid carton of packets of cigarettes.

BACKGROUND ART

 A rigid carton of packets of cigarettes is normally defined by a parallelepiped-shaped container formed by
15 folding a blank about a group of five/ten packets of cigarettes, and having a top portion which is torn open by the user along a precut tear line to extract the packets of cigarettes. A user normally removes one packet of cigarettes at a time from the carton at intervals
20 normally ranging between one and three days, so the carton is used for three to thirty days by a normal user, depending on the number of packets of cigarettes in the carton (normally five or ten) and the number of cigarettes normally smoked by the user. Once the carton
25 is opened, however, e.g. by tearing along a precut tear line, it cannot be closed again, as normally required in the case of relatively prolonged use. Known rigid cartons of packets of cigarettes also fail to provide for

adequate mechanical protection of the packets.

WO-0010892-A discloses a carton for containing a plurality of packs of cigarettes and having a shell and slide construction. One end of the shell is partially open to allow the user to push the lidded slide, containing packs of cigarettes, to an open position; this is defined by a hooking engagement between shell and slide to expose just a little more of a lid of the slide than a detachable portion, which is detached by the user to expose only one pack at a time for extraction from the carton. However, the rigid carton of packets of cigarettes disclosed by WO-0010892-A is relatively complex and thus expensive to produce.

DISCLOSURE OF INVENTION

It is an object of the present invention to provide a rigid carton of packets of cigarettes, designed to eliminate the aforementioned drawbacks, and which, in particular, is cheap and easy to produce.

According to the present invention, there is provided a rigid carton of packets of cigarettes, the carton comprising a first container for a group of packets of cigarettes, a second container housing the first container in sliding manner, so as to enable the first container to slide, with respect to the second container, between a closed position wherein the first container is fully inserted inside the second container, and an open position wherein part of the first container is extracted from the second container; the first

container being cup-shaped, and comprising an open top end, a bottom wall opposite the open top end, two opposite parallel lateral walls, and two opposite parallel, respectively front and rear, end walls; the
5 carton being characterized in that the bottom wall of the first container comprises at least one through hole sized to permit insertion of a user's finger.

BRIEF DESCRIPTION OF THE DRAWINGS

A number of non-limiting embodiments of the present
10 invention will be described by way of example with reference to the accompanying drawings, in which:

Figure 1 shows a front view in perspective of a preferred embodiment of a rigid carton of packets of cigarettes in accordance with the present invention and
15 in an open configuration;

Figure 2 shows an exploded view in perspective of the Figure 1 carton;

Figure 3 shows a rear view in perspective of the Figure 1 carton in a closed configuration;

20 Figure 4 shows a plan view of a blank from which to form an inner container of the Figure 1 carton;

Figure 5 shows a plan view of a blank from which to form an outer container of the Figure 1 carton;

Figure 6 shows a front view in perspective of an
25 alternative embodiment of a rigid carton of packets of cigarettes in accordance with the present invention and in an open configuration.

BEST MODE FOR CARRYING OUT THE INVENTION

Number 1 in the accompanying drawings indicates as a whole a rigid carton of packets 2 of cigarettes, comprising a container 3 for a group 4 of packets 2 of cigarettes, and a container 5 housing container 3 in sliding manner, so as to enable container 3 to slide, with respect to container 5, between a closed position (Figure 3) wherein container 3 is fully inserted inside container 5, and an open position (Figure 1) wherein part of container 3 is extracted from container 5.

Each packet 2 of cigarettes is parallelepiped-shaped with two end walls and a lateral surface, which is bounded by the end walls and defined by two major, respectively front and rear, lateral walls, and by two minor lateral walls. In the embodiment shown in Figures 1, 2 and 3, group 4 of packets 2 of cigarettes comprises one row of packets 2 of cigarettes, in which the major lateral walls of packets 2 of cigarettes are arranged contacting one another; and, in the Figure 6 embodiment, group 4 of packets 2 of cigarettes comprises two side by side rows of packets 2 of cigarettes, in each of which the minor lateral walls of packets 2 of cigarettes are arranged contacting one another.

As shown in Figures 1, 2 and 3, container 5 is in the form of a tubular parallelepiped defined by a lateral surface 6, which comprises two opposite parallel lateral walls 7, a top wall 8, a bottom wall 9 opposite and parallel to top wall 9, one end closed by an end wall 10,

and an opposite end having an opening 11 through which container 3 slides between said closed position (Figure 3) and said open position (Figure 1).

Container 3 is cup-shaped, and comprises an open top
5 end 12, a bottom wall 13 opposite open top end 12, two
opposite parallel lateral walls 14, and two opposite
parallel, respectively front and rear, end walls 15 and
16. When container 3 is in said closed position (Figure
3), each lateral wall 14 of container 3 is parallel to
10 and faces a respective lateral wall 7 of container 5;
bottom wall 13 of container 3 is parallel to and faces
bottom wall 9 of container 5; open top end 12 of
container 3 faces top wall 8 of container 5; rear end
wall 16 of container 3 is parallel to and faces end wall
15 10 of container 5; and front end wall 15 of container 3
faces opening 11 of container 5.

Container 3 is sized to house group 4 of packets 2
of cigarettes with a small amount of clearance, and
container 5 is sized to house container 3 with a small
20 amount of clearance, thus minimizing the amount of
packaging material required to produce containers 3 and
5, while at the same time minimizing the movement of
packets 2 of cigarettes inside container 3, and the
movement of container 3 inside container 5. Obviously,
25 the clearance between packets 2 of cigarettes and
container 3 cannot be totally eliminated, to enable
packets 2 of cigarettes to be removed easily from
container 3 by the user, and the clearance between

container 3 and container 5 cannot be totally eliminated, to enable the user to extract container 3 easily from container 5.

End walls 15 and 16 of container 3 are substantially the same size as a packet 2 of cigarettes, while lateral walls 14 of container 3 vary in height, are the same height as end walls 15 and 16 and packets 2 of cigarettes close to end walls 15 and 16, and are smaller in height than end walls 15 and 16 and packets 2 of cigarettes between end walls 15 and 16.

In the embodiment shown in Figures 1, 2 and 3, end wall 10 of container 5 has a hole 17 (Figure 3) shaped and sized to permit insertion of the user's finger. By way of example, the hole 17 shown in Figure 5 is rectangular with rounded corners, and ranges in size between 20x15 mm and 30x20 mm. The purpose of hole 17 is to assist extraction of container 3 from container 5, as of the closed position, by enabling the user to push on rear end wall 16 of container 3. In a variation not shown, wall 10 may be dispensed with entirely.

In the Figure 6 embodiment, each lateral wall 7 of container 5 has a recess 18 close to opening 11. More specifically, each recess 18 is in the form of a semicircle with a diameter ranging roughly between 20 mm and 30 mm. The purpose of recesses 18 is to assist extraction of container 3 from container 5, as of the closed position, by enabling the user to grip and pull on lateral walls 14 of container 3.

Carton 1 preferably comprises stop means for limiting slide of container 3 with respect to container 5 and so preventing detachment of container 3 from container 5, and which are defined by two tongues 19 projecting from lateral walls 14 of container 3, and by two tongues 20 projecting from lateral walls 7 of container 5. Each tongue 19 projects outwards of container 3 from a respective lateral wall 14 of container 3, and is located close to rear end wall 16 of container 3; each tongue 20 projects inwards of container 5 from a respective lateral wall 7 of container 5, and is located close to opening 11 of container 5; and each tongue 19 is so positioned as to engage the corresponding tongue 20 as container 3 is slid out of container 5, thus preventing detachment of container 3 from container 5.

In a further embodiment not shown, bottom wall 13 of container 3 comprises, for each packet 2 of cigarettes, a through hole sized to permit insertion of the user's finger, and which is located at the bottom wall of respective packet 2 of cigarettes to assist extraction of packet 2 of cigarettes from container 3.

In a further embodiment not shown, container 3 comprises supporting means for holding each packet 2 of cigarettes firmly in position inside container 3, and which are defined by a number of partitions inserted inside container 3 and defining a number of pockets, each for housing and holding a respective packet 2 of cigarettes firmly in place when container 3 is less than

full. The partitions are normally smaller in height than lateral walls 14 of container 3, and are connected to lateral walls 14 and/or bottom wall 13 of container 3.

Carton 1 normally comprises a known overwrapping
5 (not shown) of transparent plastic material, normally polypropylene, enclosing container 5. In an alternative embodiment, as opposed to overwrapping container 5, carton 1 comprises an overwrapping of transparent plastic material enclosing container 3 together with group 4 of
10 packets 2 of cigarettes, to allow the user to examine group 4 of packets 2 of cigarettes before purchasing carton 1.

As shown in Figure 4, container 3 is formed from a corresponding flat blank 21, which is substantially in
15 the form of an elongated rectangle, and the component parts of which are indicated, where possible, using the same reference numbers, with superscripts, as for the corresponding parts of container 3.

Blank 21 comprises two longitudinal crease lines 22;
20 and a number of transverse crease lines 23 defining, between longitudinal crease lines 22, a panel 14' defining a lateral wall 14, a panel 13' defining bottom wall 13, and a panel 14" defining the other lateral wall 14. Panel 14' has two tabs 15' and 16', which are located
25 on opposite sides of panel 14', are separated from panel 14' by the two longitudinal crease lines 22, and define end walls 15 and 16.

Panel 13' has two tabs 24, which are located on

opposite sides of panel 13', are separated from panel 13' by the two longitudinal crease lines 22, and define respective inner portions of end walls 15 and 16; panel 14" has two tabs 25, which are located on opposite sides
5 of panel 14", are separated from panel 14" by the two longitudinal crease lines 22, and define respective inner portions of end walls 15 and 16; and tabs 24 and 25 are so shaped as not to overlap when folded onto tabs 15' and 16'.

10 As shown in Figure 5, container 5 is formed from a corresponding flat blank 26, which is substantially in the form of an elongated rectangle, and the component parts of which are indicated, where possible, using the same reference numbers, with superscripts, as for the
15 corresponding parts of container 5.

Blank 26 comprises a number of transverse crease lines 27, which define a panel 8' defining top wall 8, a panel 7' defining a lateral wall 7, a panel 9' defining bottom wall 9, and a panel 7" defining the other lateral
20 wall 7. Panel 7' has a tab 10' separated from panel 7' by a longitudinal crease line 28 and defining end wall 10.

Panels 8', 9' and 7" have three respective tabs 29, 30 and 31, which are separated from corresponding panels 8', 9' and 7" by longitudinal crease line 28, define
25 respective inner portions of end wall 10, and are so shaped as not to overlap when folded onto tab 10'. Panel 8' also has a tab 32 separated from panel 8' by a transverse crease line 27 and defining an inner portion

of a lateral wall 7.

In an alternative embodiment not shown, the longitudinal edges (between the lateral walls and the top and bottom wall) and/or the transverse edges (between the lateral walls and end walls) of container 3 and/or container 5 may be beveled or rounded. The longitudinal edges of container 3 must, obviously, be substantially the same shape and size as the longitudinal edges of container 5 to enable container 3 to slide smoothly with respect to container 5. More specifically, the edges of container 3 may be beveled or rounded to reproduce the same shape as the edges of packets 2 of cigarettes.

In a further embodiment not shown, at least one of walls 7, 8, 9, 10, 14, 15 may have at least one arc-shaped portion close to one of its edges, exactly as described and illustrated in Patent EP 1066206.

CLAIMS

1) A rigid carton of packets of cigarettes, the carton comprising a first container (3) for a group (4) of packets (2) of cigarettes, a second container (5) housing the first container (3) in sliding manner, so as to enable the first container (3) to slide, with respect to the second container (5), between a closed position wherein the first container (3) is fully inserted inside the second container (5), and an open position wherein part of the first container (3) is extracted from the second container (5); the first container (3) being cup-shaped, and comprising an open top end (12), a bottom wall (13) opposite the open top end (12), two opposite parallel lateral walls (14), and two opposite parallel, respectively front and rear, end walls (15, 16); the carton (1) being characterized in that the bottom wall (13) of the first container (3) comprises at least one through hole sized to permit insertion of a user's finger.

2) A carton as claimed in Claim 1, wherein the bottom wall (13) of the first container (3) comprises, for each packet (2) of cigarettes, a respective through hole sized to permit insertion of a user's finger and located at a bottom wall of the respective packet (2) of cigarettes.

3) A carton as claimed in Claim 1, 2 or 3, wherein the second container (5) is substantially in the form of

a tubular parallelepiped defined by a lateral surface (6), which comprises two opposite parallel lateral walls (7), a top wall (8), and a bottom wall (9) parallel to and opposite the top wall (8).

5 4) A carton as claimed in Claim 3, wherein the second container (5) is in the form of a tubular parallelepiped having one end closed by an end wall (10), and an open end (11); when the first container (3) is in the closed position, each lateral wall (14) of the first
10 container (3) being parallel to and facing a respective lateral wall (7) of the second container (5), the bottom wall (13) of the first container (3) being parallel to and facing the bottom wall (9) of the second container (5), the open top end (12) of the first container (3)
15 facing the top wall (8) of the second container (5), the rear end wall (16) of the first container (3) being parallel to and facing the end wall (10) of the second container (5), and the front end wall (15) of the first container (3) facing the open end (11) of the second
20 container (5).

5) A carton as claimed in Claim 4, wherein the end wall (10) of the second container (5) has at least one through hole (17) sized to permit insertion of a user's finger.

25 6) A carton as claimed in Claim 4, wherein the end wall (10) of the second container (5) is absent.

7) A carton as claimed in Claim 4, 5 or 6, wherein each lateral wall (7) of the second container (5) has a

recess (18) close to the open end (11).

8) A carton as claimed in Claim 7, wherein each recess (18) is substantially semicircular.

9) A carton as claimed in any one of Claims 4 to 8,
5 and further comprising stop means (19, 20) for limiting slide of the first container (3) with respect to the second container (5) and so preventing detachment of the first container (3) from the second container (5).

10) A carton as claimed in Claim 9, wherein the stop
10 means (19, 20) comprise at least one first tongue (19), which projects outwards of the first container (3) from a respective lateral wall (14) of the first container (3), and is located close to the rear end wall (16) of the first container (3); and a second tongue (20), which
15 projects inwards of the second container (5) from a respective lateral wall (7) of the second container (5), and is located close to the open end (11) of the second container (5); the first and second tongue (19, 20) being so positioned that the first tongue (19) engages the
20 second tongue (20) as the first container (3) is slid out of the second container (5).

11) A carton as claimed in any one of Claims 4 to
10, wherein the end walls (15, 16) of the first container (3) are substantially the same size as a packet (2) of
25 cigarettes; the lateral walls (14) of the first container (3) varying in height, so as to be the same height as the end walls (15, 16) and the packets (2) of cigarettes close to the end walls (15, 16), and to be smaller in

height than the end walls (15, 16) and the packets (2) of cigarettes between the end walls (15, 16).

12) A carton as claimed in any one of Claims 4 to 11, wherein the first container (3) is formed from a flat first blank (21) comprising two longitudinal crease lines (22); and a number of transverse crease lines (23) defining, between the two longitudinal crease lines (22), a first panel (14') defining a lateral wall (14), a second panel (13') defining the bottom wall (13), and a third panel (14'') defining the other lateral wall (14); the first panel (14') having two first tabs (15', 16'), which are located on opposite sides of the first panel (14'), are separated from the first panel (14') by the two longitudinal crease lines (22), and define the end walls (15, 16).

13) A carton as claimed in Claim 12, wherein the second panel (13') of the first blank (21) has two second tabs (24), which are located on opposite sides of the second panel (13'), are separated from the second panel (13') by the two longitudinal crease lines (22), and define respective inner portions of the end walls (15, 16); the third panel (14'') of the first blank (21) has two third tabs (25), which are located on opposite sides of the third panel (14''), are separated from the third panel (14'') by the two longitudinal crease lines (22), and define respective inner portions of the end walls (15, 16); the second and third tabs (24, 25) being so shaped as not to overlap when folded onto the first tabs

(15', 16').

14) A carton as claimed in any one of Claims 4 to 13, wherein the second container (5) is formed from a flat second blank (26) comprising a number of transverse
5 crease lines (27), which define a first panel (8') defining the top wall (8), a second panel (7') defining a lateral wall (7), a third panel (9') defining the bottom wall (9), and a fourth panel (7'') defining the other lateral wall (7); the second panel (7') having a first
10 tab (10'), which is separated from the first panel (7') by a longitudinal crease line (28) and defines the end wall (10).

15 15) A carton as claimed in Claim 14, wherein the first, third and fourth panel (8', 9', 7'') of the second blank (26) have three respective second tabs (29, 30, 31), which are separated from the corresponding panels (8', 9', 7'') by the longitudinal crease line (28), define respective inner portions of the end wall (10), and are so shaped as not to overlap when folded onto the first
20 tab (10').

16) A carton as claimed in any one of Claims 1 to 15, and further comprising supporting means for holding each packet (2) of cigarettes firmly in place inside the first container (3).

25 17) A carton as claimed in Claim 16, wherein the supporting means comprise at least one partition inserted inside the first container (3).

18) A carton as claimed in Claim 17, wherein the

supporting means comprise a number of partitions inserted inside the first container (3) and defining a number of pockets, each for housing a respective packet (2) of cigarettes.

5 19) A carton as claimed in any one of Claims 1 to 18, and further comprising a first overwrapping of transparent plastic material enclosing the first container (3) together with the group (4) of packets (2) of cigarettes.

10 20) A carton as claimed in any one of Claims 1 to 19, and further comprising a second overwrapping enclosing the second container (5).

15 21) A carton as claimed in Claim 20, wherein the second overwrapping is made of transparent plastic material.

22) A carton as claimed in any one of Claims 1 to 21, wherein each packet (2) of cigarettes is in the form of a parallelepiped having two end walls and a lateral surface, which is bounded by the end walls and defined by
20 two major, respectively front and rear, lateral walls, and by two minor lateral walls; the group (4) of packets (2) of cigarettes comprising one row of packets (2) of cigarettes, in which the major lateral walls of the packets (2) of cigarettes are arranged contacting one
25 another.

23) A carton as claimed in any one of Claims 1 to 21, wherein each packet (2) of cigarettes is in the form of a parallelepiped having two end walls and a lateral

surface, which is bounded by the end walls and defined by two major, respectively front and rear, lateral walls, and by two minor lateral walls; the group (4) of packets (2) of cigarettes comprising two side by side rows of
5 packets (2) of cigarettes, in each of which the minor lateral walls of the packets (2) of cigarettes are arranged contacting one another.

24) A carton as claimed in any one of Claims 1 to 23, wherein the longitudinal edges and/or the transverse
10 edges of the first container (3) and/or of the second container (5) are beveled or rounded.

25) A carton as claimed in any one of Claims 1 to 23, wherein at least one of the walls (7, 8, 9, 10, 14, 15) defining said first and said second container (3, 5) has at least one arc-shaped portion close to one of its edges.

26) A rigid carton of packets of cigarettes, the carton comprising a first container (3) for a group (4) of packets (2) of cigarettes, a second container (5)
20 housing the first container (3) in sliding manner, so as to enable the first container (3) to slide, with respect to the second container (5), between a closed position wherein the first container (3) is fully inserted inside the second container (5), and an open position wherein
25 part of the first container (3) is extracted from the second container (5); the carton (1) being characterized in comprising a first overwrapping of transparent plastic material enclosing the first container (3) together with

the group (4) of packets (2) of cigarettes.

27) A rigid carton of packets of cigarettes, the carton comprising a first container (3) for a group (4) of packets (2) of cigarettes, a second container (5) housing the first container (3) in sliding manner, so as to enable the first container (3) to slide, with respect to the second container (5), between a closed position wherein the first container (3) is fully inserted inside the second container (5); and an open position wherein part of the first container (3) is extracted from the second container (5); the carton (1) being characterized in comprising supporting means for holding each packet (2) of cigarettes firmly in place inside the first container (3).

28) A carton as claimed in Claim 27, wherein the supporting means comprise at least one partition inserted inside the first container (3).

29) A carton as claimed in Claim 28, wherein the supporting means comprise a number of partitions inserted inside the first container (3) and defining a number of pockets, each for housing a respective packet (2) of cigarettes.

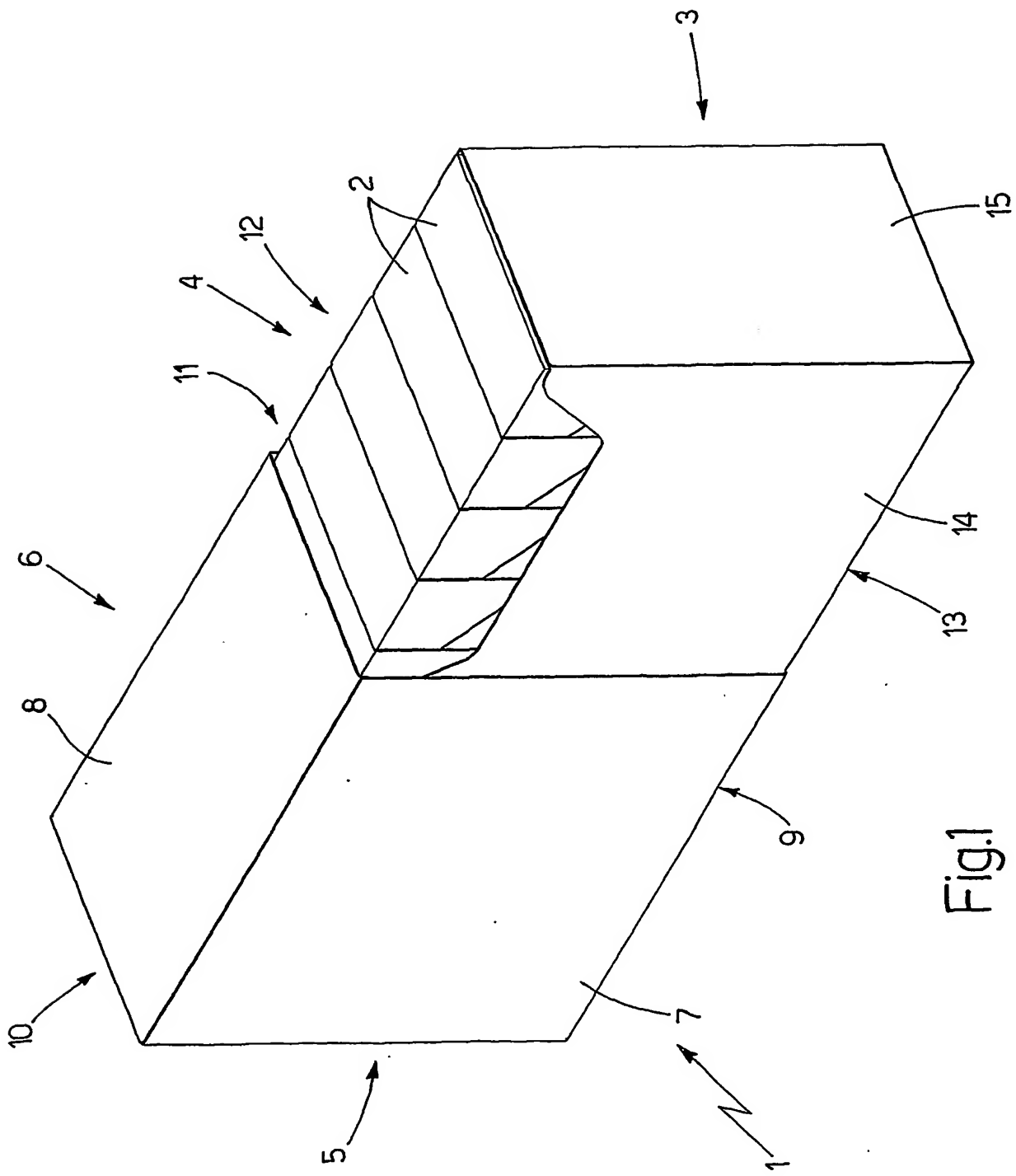
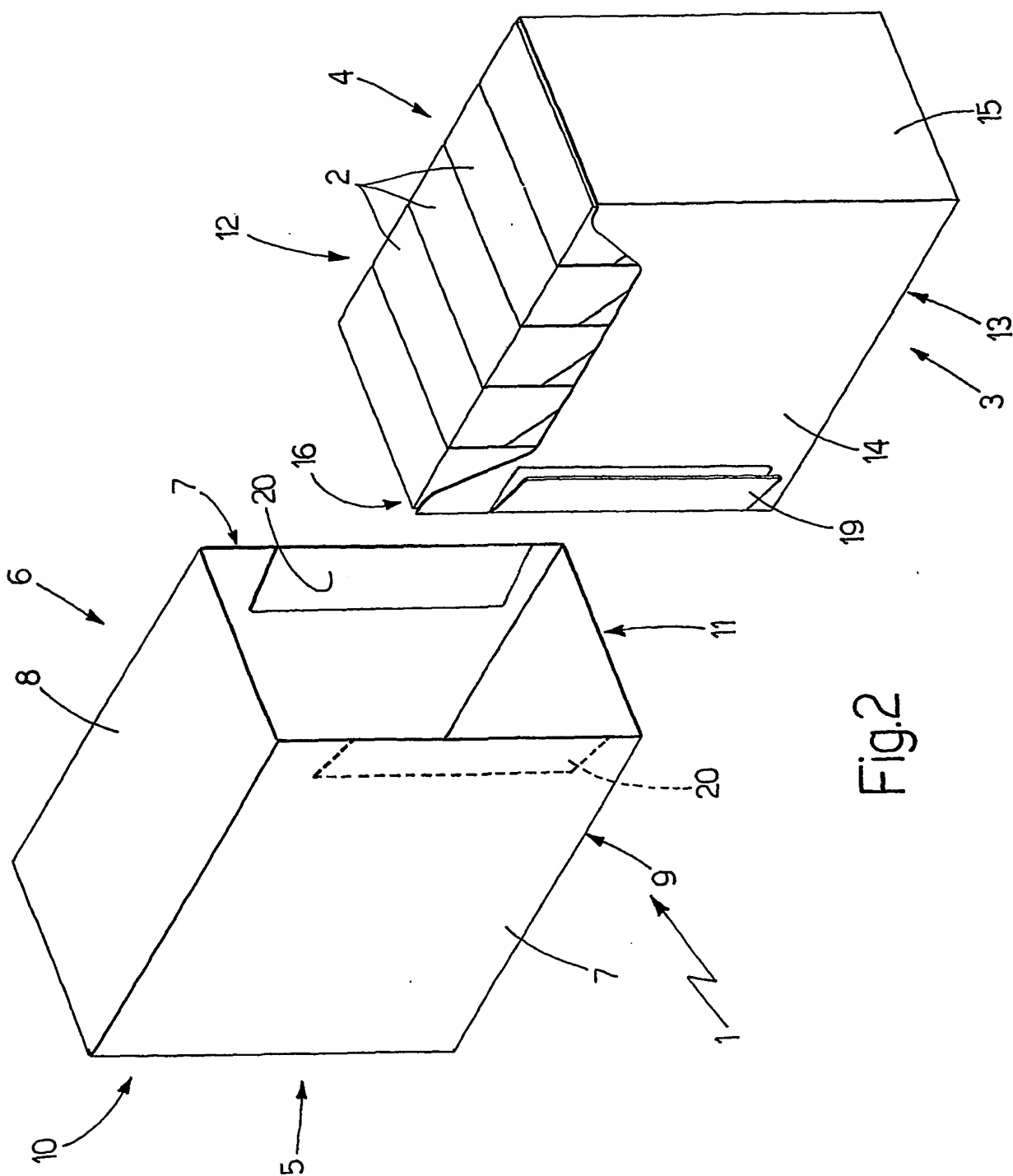
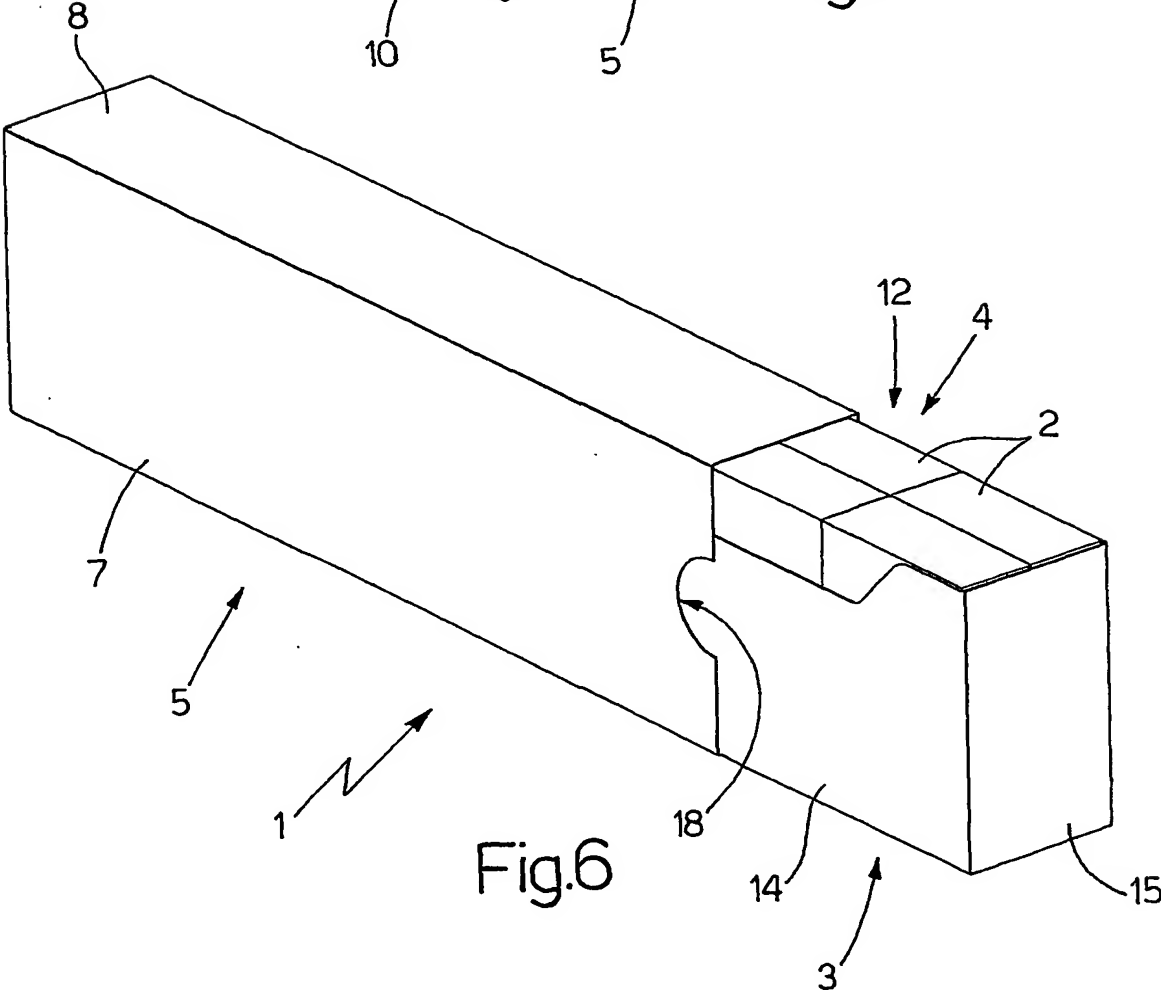
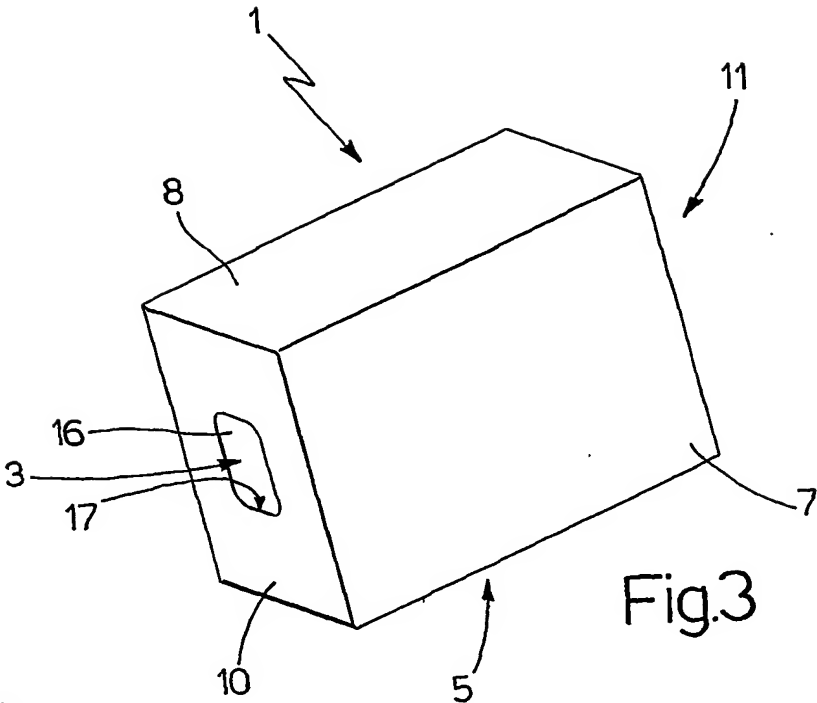
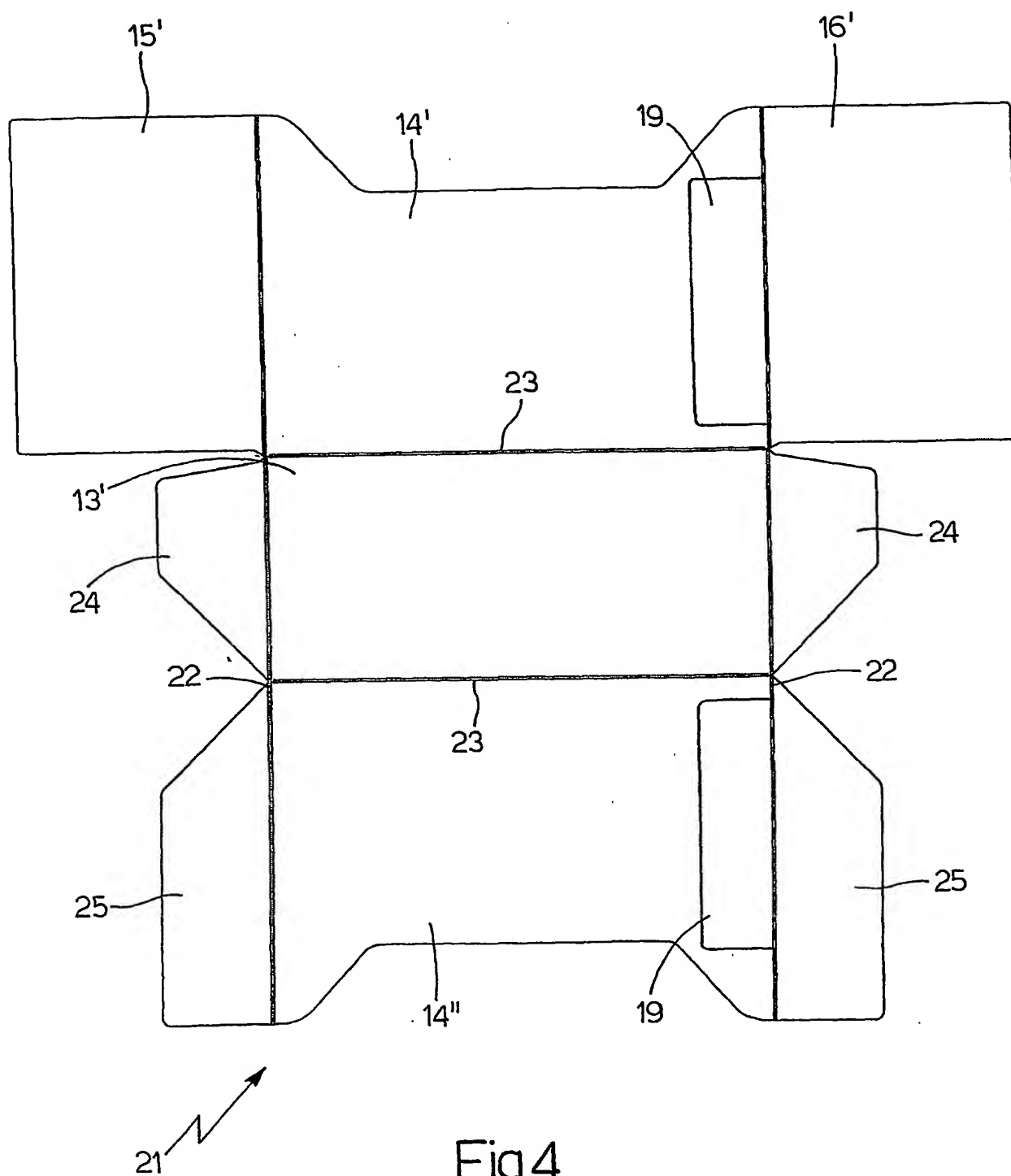
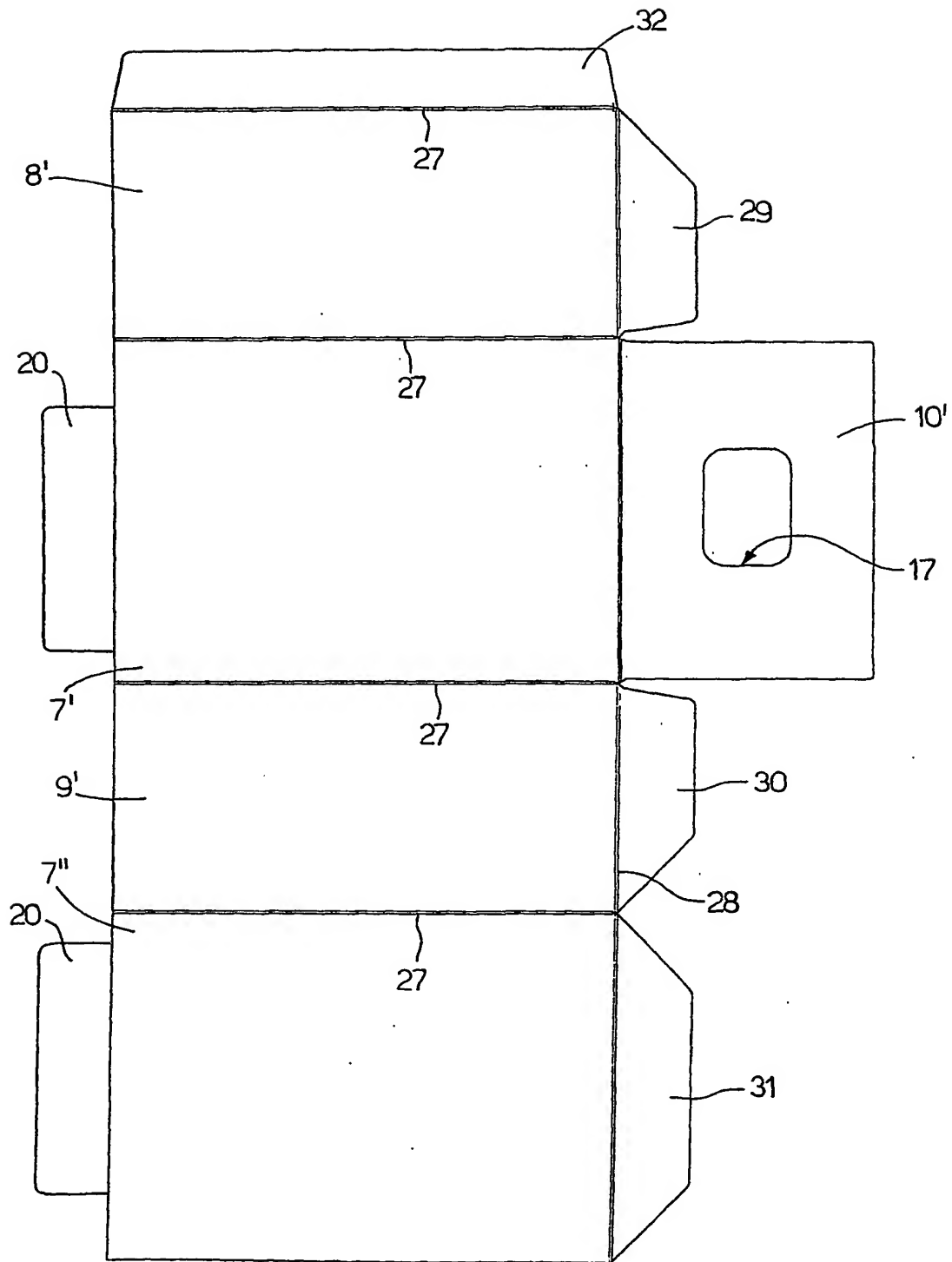


Fig.1









26

Fig.5

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 December 2003 (31.12.2003)

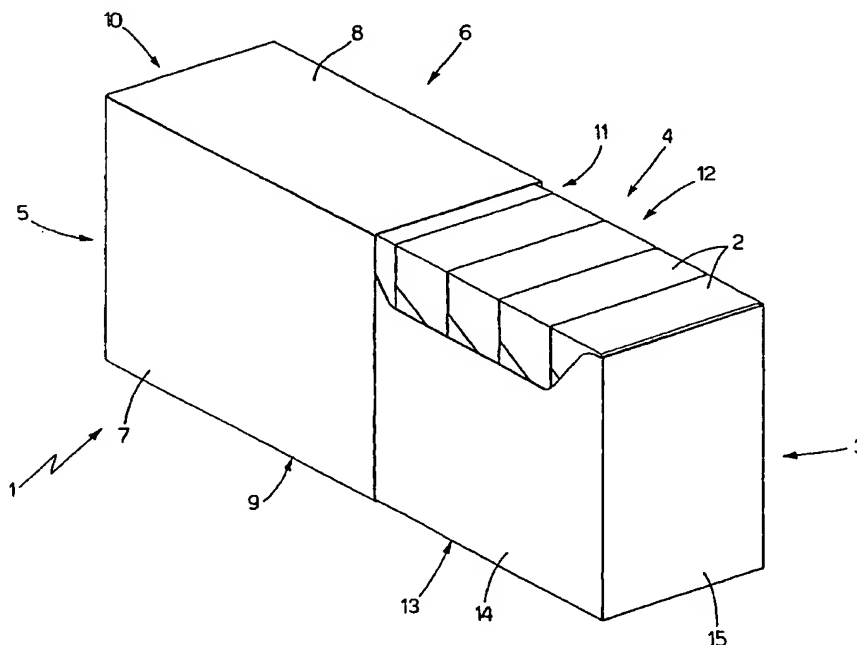
PCT

(10) International Publication Number
WO 2004/000690 A3

- (51) International Patent Classification⁷: **B65D 85/10, 5/38** (74) Agents: **JORIO, Paolo** et al.; c/o Studio Torta S.r.l., Via Viotti, 9, I-10121 Torino (IT).
- (21) International Application Number: PCT/IT2003/000387 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 23 June 2003 (23.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
BO2002A 000401 24 June 2002 (24.06.2002) IT
- (71) Applicant (*for all designated States except US*): **G.D. SOCIETA' PER AZIONI** [IT/IT]; Via Battindarno, 91, I-40133 Bologna (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **GIANNINI, Antonella** [IT/IT]; Via Murri, 114, I-40137 Bologna (IT). **CHINI, Stefano** [IT/IT]; Via Gramsci, 11, I-40068 San Lazzaro di Savena (IT). **DRAGHETTI, Fiorenzo** [IT/IT]; Via San Donino, 506, Frazione Villafontana, I-40059 Medicina (IT).
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
18 March 2004

[Continued on next page]

(54) Title: RIGID CARTON OF PACKETS OF CIGARETTES



(57) Abstract: A rigid carton (1) of packets (2) of cigarettes, having a first container (3), which houses a group (4) of packets of cigarettes and is in turn housed inside a second container (5) so as to slide, with respect to the second container (5), between a closed position wherein the first container (3) is fully inserted inside the second container (5), and an open position wherein part of the first container (3) is extracted from the second container (5).

WO 2004/000690 A3

WO 2004/000690 A3



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IT 03/00387

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B65D85/10 B65D5/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| A | WO 00 10892 A (BRITISH AMERICAN TOBACCO LTD) 2 March 2000 (2000-03-02) cited in the application page 4, line 1 - page 9, line 17; figures 1-4 | 1,3-5,9, 20,21 |
| A | FR 2 499 947 A (REYNOLDS TOBACCO) 20 August 1982 (1982-08-20) page 4, line 21 - page 5, line 15; figures 1-3 | 1,3-5,9, 10 |
| A | DE 90 03 536 U (ORBKE) 13 June 1990 (1990-06-13) | |
| A | WO 00 43289 A (DRAGHETTI) 27 July 2000 (2000-07-27) cited in the application | |
| | -/- | |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

18 September 2003

Date of mailing of the international search report

28. 11. 03

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Martens, L.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IT 03/00387

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| A | & EP 1 066 206 A (DRAGHETTI) 10 January 2001 (2001-01-10) cited in the application ----- | |
| A | GB 431 721 A (MILLAR) 15 July 1935 (1935-07-15) ----- | |

INTERNATIONAL SEARCH REPORT

international application No.
PCT/IT 03/00387

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-25

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-25

Carton comprising a first container for a group of packets of cigarettes and a second container housing the first container in a sliding manner, whereby the first container is cup-shaped with an open top end and whereby the bottom wall of the first container comprises at least one through hole.

2. claim: 26

Carton comprising a first container for a group of packets of cigarettes and a second container housing the first container in a sliding manner, whereby a first overwrapping of transparent plastic material encloses the first container together with the group of packets of cigarettes.

3. claims: 27-29

Carton comprising a first container for a group of packets of cigarettes and a second container housing the first container in a sliding manner, whereby supporting means are present for holding each packet of cigarettes in place.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IT 03/00387

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|---|--|
| WO 0010892 | A | 02-03-2000 | AU 5436699 A WO 0010892 A1 TW 401367 B | 14-03-2000 02-03-2000 11-08-2000 |
| FR 2499947 | A | 20-08-1982 | DE 8104045 U1 BE 892125 A1 FR 2499947 A3 IT 1149645 B LU 83944 A1 NL 8200543 A ,B, | 02-07-1981 27-05-1982 20-08-1982 03-12-1986 07-07-1982 01-09-1982 |
| DE 9003536 | U | 13-06-1990 | DE 9003536 U1 | 13-06-1990 |
| WO 0043289 | A | 27-07-2000 | IT B0990029 A1 AU 5191799 A CN 1298362 T EP 1066206 A1 WO 0043289 A1 US 6484930 B1 | 21-07-2000 07-08-2000 06-06-2001 10-01-2001 27-07-2000 26-11-2002 |
| EP 1066206 | A | 10-01-2001 | IT B0990029 A1 AU 5191799 A EP 1066206 A1 US 6484930 B1 CN 1298362 T WO 0043289 A1 | 21-07-2000 07-08-2000 10-01-2001 26-11-2002 06-06-2001 27-07-2000 |
| GB 431721 | A | 15-07-1935 | NONE | |